

Amendments to the Claims

Please note that "strikeout" matter is shown with larger-than-normal italic letters containing the strikeout horizontal marks such as in this example: *~~strikeout~~*.

Claim 1. (Cancelled)
Claim 2. (Cancelled)
Claim 3. (Cancelled)
Claim 4. (Cancelled)
Claim 5. (Cancelled)
Claim 6. (Cancelled)
Claim 7. (Cancelled)
Claim 8. (Cancelled)
Claim 9. (Cancelled)
Claim 10. (Cancelled)
Claim 11. (Cancelled)
Claim 12. (Cancelled)
Claim 13. (Cancelled)
Claim 14. (Cancelled)
Claim 15. (Cancelled)
Claim 16. (Cancelled)
Claim 17. (Cancelled)
Claim 18. (Cancelled)
Claim 19. (Cancelled)
Claim 20. (Cancelled)
Claim 21. (Cancelled)
Claim 22. (Cancelled)
Claim 23. (Cancelled)
Claim 24. (Cancelled)

Claim 25. (Original) An electrode which includes a coating having at least one static layer of electrode releasable molecules to be delivered into biological cells.

Claim 26. (Original) A plurality of electrodes of claim 25 which form an electrode assembly.

Claim 27. (Original) The electrode assembly of claim 26 wherein said plurality of electrodes are arranged in at least two parallel rows of electrodes.

Claim 28. (Original) The electrode assembly of claim 27 wherein said parallel rows of electrodes include needle electrodes.

Claim 29. (Original) The electrode of claim 25 wherein said molecules in said static coating are in a solid phase.

Claim 30. (Original) The electrode of claim 25 wherein said molecules in said static coating are in a gel.

Claim 31. (Original) The electrode of claim 25 wherein said electrode includes a fixed electrode surface which is coated with said static layer of electrode releasable molecules.

Claim 32. (Original) The electrode of claim 31 wherein:

said fixed electrode surface 42 includes a fixed surface matrix, and

said molecules in said static coating are in a liquid fixed on said fixed surface matrix.

Claim 33. (Original) The electrode of claim 31 wherein said fixed electrode surface includes solid surface particles.

Claim 34. (Original) The electrode of claim 33 wherein said solid surface particles are metal particles.

Claim 35. (Original) The electrode of claim 31 wherein said fixed electrode surface includes a liposome matrix.

Claim 36. (Original) The electrode of claim 31 wherein said fixed electrode surface includes a solid polymer matrix.

Claim 37. (Original) The electrode of claim 25 wherein said molecules in said static coating are macromolecules.

Claim 38. (Original) The electrode of claim 25 wherein said macromolecules in said static coating include a polynucleotide vaccine.

Claim 39. (Original) The electrode of claim 25 wherein said macromolecules in said static coating include a solid phase polynucleotide vaccine.

Claim 40. (Original) The electrode of claim 25 wherein said macromolecules in said static coating include a DNA vaccine.

Claim 41. (Original) The electrode of claim 25 wherein said macromolecules in said static coating include a solid phase DNA vaccine.

Claim 42. (Original) The electrode of claim 25 wherein said macromolecules in said static coating include an RNA vaccine.

Claim 43. (Original) The electrode of claim 25 wherein said macromolecules in said static coating include a solid phase RNA vaccine.

Claim 44. (Original) The electrode of claim 25 wherein said macromolecules in said static coating include a protein-based vaccine.

Claim 45. (Original) The electrode of claim 25 wherein said macromolecules in said static coating include a solid phase protein-based vaccine.

Claim 46. (Original) The electrode of claim 25 wherein said macromolecules in said static coating include an organ treating agent.

Claim 47. (Original) The electrode of claim 46 wherein said organ treating agent includes a deep tissue tumor treating agent.

Claim 48. (Original) The electrode of claim 25 which is in a form of a needle electrode.

Claim 49. (Original) The electrode of claim 25, wherein coating of said electrode with said static layer of molecules to be

delivered to the biological cells is carried out by the following steps:

preparing a liquid medium in which a quantity of said molecules are carried,
contacting said electrode with the prepared medium, and
removing said electrode from the medium and drying off the medium, such that a static coating of said molecules remains on said electrode.

Claim 50. (Original) The electrode of claim 25 wherein coating of said electrode with said static layer of molecules to be delivered to the biological cells is carried out by the following steps:

preparing a liquid medium in which a quantity of said molecules are carried,
contacting said electrode with the prepared medium,
applying pulse waveforms to said electrode, such that a portion of said molecules are bound to said electrode, and
removing said electrode from the medium and drying off the medium, such that a coating of said molecules remains on said electrode.

Claim 51. (Cancelled)